Nature & Faith

In the name of Allah,Most Gracious,Most Merciful.

Although Eeman (faith) is to believe in the unseen realities solely on the testimony of the prophets, but its foundation is belief in Allah. This means that belief in Allah's being and His Oneness, knowledge of His unique attributes and conviction of His greatness should be embedded in our hearts. Once able to fully comprehend Allah's greatness a person's heart should be so full of feelings of appreciation and praise for Him that he spontaneously calls out: "O Lord! You have not created (all) this without purpose." The easiest and most effective way to reach this level of understanding is to reflect on His creation and focus on observing and contemplating deeply on His creativity, craftsmanship and artistry.

It is to enable us to understand His greatness that Allah has laid so much emphasis on the need to reflect on the signs in our own souls and our environment i.e. within our own selves and the world around us. For this purpose a brief overview of the knowledge available so far to humans regarding the human body and the universe is being presented here so that Allah's greatness will be imprinted on our hearts as this is the basis of Eeman.

The Human Body

Although a person's physical being, when judged by the size of his body, is not very large, but when you focus on the way that it is made, you realize that no human being has been or will be able to make a machine such as this. What is even more amazing is that despite there being billions of people, no two people are exactly the same. A strange and vast world has been condensed within the human body, which even to this day, despite trying, man has not been able to fully comprehend.

The Brain

The brain is the central office which controls, directs and coordinates the varied activities of all the innumerable organs of the body. It receives messages from each of the senses, interprets them, sends the proper replies to the organs concerned so that the body reacts appropriately (jumps out of the way of approaching car, for instance), and registers all the information received in the archives of the memory. Think of a huge telephone exchange in continual contact with every man, woman and child on earth, sending and receiving messages to and from each one every few seconds — and you have a faint idea of the incredibly complex organization of the brain.

In the white and grey matter of the brain there are nearly a thousand million nerve cells, each of which is, by turns, an electric battery and a small telegraph transmitter. Each cell branches out into a number of fine conducting threads, the nerve fibers, which extend to all parts of the body. A large number of them run down the hollow back-bone, twisted together into a thick cable, the spinal cord, admirably protected by the bony and well-cushioned walls of the spine. Through these tiny threads, each of which is covered with an insulating sheath, a current flows at the speed of about 70 m.p.h., carrying messages to and from the brain, with marvellous speed and

accuracy. There is an elaborate system of relays, condensers, switches, etc., which permits the transmission of the most unexpected messages between the brain and each of the millions of cells it controls, without the least confusion or delay.

The most complicated radio station, the most up-to-date telephone exchange is like a tin of sardines compared to the incredibly elaborate maze of the nerve system of the brain.

The Ear

Long before man discovered wireless, the ear knew all that was to be known about the reception of sound waves. The human ear consists of a funnel beautifully adapted to pick up sounds and equipped with fleshy folds which enable it to perceive the direction from which the sounds come. Inside the ear, fine hairs and a sticky wax prevent harmful insects, dust, etc. from getting in. Across the inner end of the funnel there is a tightly stretched membrane, the ear-drum, which vibrates like the skin of a table when sound waves strike it. The vibrations are passed on and amplified by three bones (called the hammer, the stirrup and the anvil) whose relative sizes are precisely adjusted to produce just the needed amplification. Indeed these bones never grow: they are of exactly the same size in the infant and in the adult.

The amplified vibrations are carried by the bones to another membrane just beyond which lies the wonderful organ of hearing, the inner ear. This is a small tube (the cochlea) coiled up like the shell of a snail, and filled with a liquid in which a harp of 6,000 strings ranging in length from 1/20th to ½ mm., hangs suspended. Each string vibrates to a particular frequency of sound so that the ear can hear all possible combinations of 6,000 different sounds. The vibration of the strings are transmitted to 18,000 nerve cells whose fibers communicate with the brain. It not only acts as a receiver for sound, but plays a major role in the sense of balance and body position.

The Eye

The eye is the world's most efficient television station: it takes flawless pictures in colour and transmit them without the least blurring to the brain. It takes a photographer to appreciate fully the working of the eye. Like any camera it is a small dark box, with an aperture in front fitted with a transparent pane. In front of the pane there is a shutter of variable speed, (the iris) with an adjustable slit and automatic release. Behind, there is the crystalline lanes whose curvature is continually adjusted by automatic muscles so that whatever is looked at is always sharply in focus. Six large powerful muscles control the movements of the eye and point it in any desired direction.

The delicate parts of this precision instrument are kept clean by the eyelids which are window-wipers and use a cleaning fluid secreted by the gland at the corner of the eye and poured in through a siphone. A constant temperature is maintained, as in any laboratory with highly sensitive apparatus, by means of a heat regulating membrane, the choroid. The photographic plate of the eye is a small

screen at the back, the retina, on to which the images of the things we see are focused. The retina can take 10 different pictures each second or 800,000 pictures a day, wiping itself clean after each. It is so 'fast' that 30,000 separate points of light can be recorded by a single square millimeter (the size of a nail head) of its surface. All the pictures are in vivid colour, with sharp outlines, and delicate shading, they are, besides, movies and in 3-dimensions, thanks to the stereoscopic focus of the two eyes. The human eye can distinguish about 10 million different colors.

The Heart

The Heart is a small organ, about the size of the fist, (4 inches long and 2 ½ inches broad), weighing not much more than eight ounces, yet this small pump can work prodigiously. It keeps on pumping day and night for a whole life-time without the least pause, rating some 100,000 strokes a day and sending about a gallon of blood circulating through the body once every 13 seconds. In a single day the heart pumps enough blood to fill a good-sized oil truck; in a single year it could fill a train of 65 large oil wagons.

The heart is specially built for the immense job it has to do. Its walls are made up of very tough muscular fibers, and it is surrounded by a double membrane (the pericardium) containing a fluid which lubricates its continual movement. The beat of the heart takes place in two steps as first the upper and then the lower half contracts. This enables each half of the heart to rest while the other is beating. Inside, the heart is divided into 4 chambers, two upper chambers called the auricles and two lower chambers called the ventricles. Blood always flows from the auricles to the ventricles, and this one way traffic is maintained by umbrella-shaped valves which guard the opening between the two sets of chambers.

Digestion

The digestive system can be look up as a factory where food is tasted by the tongue, then crushed by the teeth, moistened with saliva and finally,— after elaborate precautions to avoid shunting mistakes,— is pushed through the gullet into the stomach, a chemical plant where the most astonishing changes occur. Here millions of cells, too small to be seen, produce a dozen highly complex chemicals which break up the food we have eaten, whether it be meat, spinach, or rice, or cheese, into simpler substances which can be absorbed by the cells of our body and build up into our flesh and bone. The chemical changes that take place are truly marvellous — well beyond the capacity of the best equipped of our laboratories. And there are five million of these little chemical units in the stomach, some forty million in the intestines, and more than three and a half billion in the liver. They produce, not only the chemicals needed to digest our food, where and when required, but also effective remedies against diseases like cholera and dysentery. At the same time the liver manufactures substances which help the body to burn some of the food we have eaten to provide the heat and energy every living being needs. The digestive system is not only a chemical factory, but a power house as well.

The Lungs

These are organs which brings the blood into contact with clean fresh air — for they knew, long before we ourselves were aware of the fact, that to purify the blood nothing is better than a good bath of oxygen.

At each breath, air is drawn into more than 1500,000 little air-sacs in the lungs, which spread out would cover an area of some 200 square yards — the size of a nice little vegetable plot. These little balloon - like sacs are made of a thin elastic tissue which allows air to pass through but prevents blood from oozing in.

The blood is carried to the lungs through 50,000,000,000 tiny hair thin tubes which form a close network all along the outside of the little balloons of the lungs. Each day they bring in some 10,000 liters of blood. Oxygen is sucked in by the red blood cells, while waste products of the body like carbon dioxide and water are given up by the blood, pass into the little air sacs, and are breathed out.

As long as a child is in the womb of its mother its lungs do not function, and the flow of blood is turned away from the lungs by means of a special little door in the heart. As soon as it is born, the baby, who is on the verge of suffocation, utters a loud cry. The cry produces a whole series of wonderful changes. The great bags of the lungs open and air rushes in to fill them. A great flow of blood is drawn into the lungs which like a violent draught of air slams shut the little door inside the heart which had hitherto turned the blood away.

The Skin

The skin, with its vast network of sensitive fibres spread over the body's surface is equally fascinating. The moment a hot object comes in contact with our skin, or even comes close to it, about thirty thousand hot cells feel it, and instantly report it to the brain. Similarly, there are 250,000 "cord cells" within our skin which crowd the brain with messages as soon as contact is made with a cold object. The body then begins to shiver and veins in the skin become dilated in order to make up for the loss of warmth in the body. When intense heat is "reported" to the brain, three million perspiratory glands are activated to release the cool fluid we recognize as perspiration.

THE UNIVERSE ... Its Order & Perfection

The Sun is an average star. Astronomers believe that the Sun is about 4.6 billion years old and will keep shining for about another 7 billion years. The Sun provides Earth with vast amounts of energy every day. The oceans and seas store this energy and help keep the temperature of Earth at a level that allows a wide variety of life to exist. Plants use the Sun's energy to make food, and plants provide food for other organisms. The Sun's energy also creates wind in Earth's atmosphere. This wind can be harnessed and used to produce power.

Not only must the average temperature on the earth be ideal, the available heat must also be distributed fairly equally over the whole planet. A number of special precautions have been taken to ensure that this in fact happens. The inclination of earth of 23.5

degree prevents overheating of the atmosphere in the regions between the poles and the equator. If this inclination did not exist the temperature gradient between the poles and equator would be much higher than it is and temperature zones would not be so easy to live in. The rotational speed of earth on its axis also helps keep the thermal distribution in balance. The earth makes a complete rotation once every 24 hours with the result that alternating periods of daylight and darkness are fairly short .Because they are short the thermal distribution between the dark and light sides of the planet is quite modest. The importance of this can be seen in the extreme example of mercury. As the rotational speed of mercury on its axis is so slow a day lasts longer than a year and the difference between daytime and night time temperature is almost 1000 Celsius. This terrible temperature difference would allow nothing to live.

Geography also helps to distribute heat equally over the earth. There is a difference of about 100 C between the polar and equatorial regions of earth. If such a difference of temperature were to exist over a completely level area the result would be winds reaching speed as high as 1000 km an hour sweeping away everything in their path.

Instead the earth is full of geographical barriers that block the huge movements of air that such a difference of temperature would otherwise cause. These are chains of mountains. At the same time there are number of auto control systems that help keep the atmospheric temperature in balance. For example when a region heats up the rate at which its water evaporises increases causing clouds to form. These clouds reflect more light back into space and make rain fall. This prevents both the air and the surface below from growing warmer.

Galaxies are huge collections of billions of stars. Milky Way, the large, disk-shaped aggregation of stars, or galaxy, that includes the Sun and its solar system. In addition to the Sun, the Milky Way contains about 400 billion other stars. There are hundreds of billions of other galaxies in the universe, some of which are much larger and contain many more stars than the Milky Way. The center of the Milky Way is about 25,000 light-years from the Sun (a light-year is the distance light travels in a year, about 9.46 trillion km or 5.88 trillion mile).

Astronomers classify the Milky Way as a large spiral or possibly a barred spiral galaxy, with several spiral arms coiling around a central bulge about 10,000 light-years thick. Stars in the central bulge are close together, while those in the arms are farther apart. The arms also contain clouds of interstellar dust and gas. The disk is about 100,000 light-years in diameter. The Milky Way system contains up to 2,000 billion times more mass than the Sun contains. The galaxy spins, but the center spins faster than the arms. At Earth's position, the galaxy makes a complete rotation about every 200 million years.

In 1998 astronomers at the University of Washington found a quasar with an estimated brightness of about 30,000 times that of the entire Milky Way Galaxy.

- The stars orbit at speeds up to 1.8 million km/h (1.1 million mph) — 17 times the speed at which Earth circles the Sun.
- The Great Wall, a galactic filament discovered in 1989, stretches across more than half a billion light-years of space.
- In 1998 researchers found strong evidence that the Milky Way galaxy's center, which is 28,000 light-years away from Earth, contains a black hole more than two million times the mass of the Sun.
- According to astronomical calculations, it has frequently happened that entire galactic systems consisting of millions and millions of moving stars have entered other galactic systems and have passed right through them with out any collisions having taken place.

Conclusion

No one in his right mind would claim that a camera had come into existence accidently, but there are a good number of intellectuals in this world who believe that an eye came into existence by the merest chance.

Pondering and reflecting on the innumerable signs that the Creator of the universe has placed in this universe and within man's own being and acting on the conclusion one draws from this contemplation is the very way to acquire Eeman. It was not impossible for Allah to send bread down from the sky for our nutrition. Why then was it necessary that the winds should blow, the clouds be formed and the rain should come down? What was the need for the land to be furrowed, the wheat to be sown, the wheat heads to appear and then the hot, dry winds to blow and ripen the grains and in this way after passing through the various stages and months of heat and cold, the wheat-grain should reach the farmer from his fields? This world could also have been absolutely plain and without colour. The different types of flowers and fruits, the seas and stars and the various stages between the sowing of a seed until it becomes a tree, all invite a person to reflect. If a person's eyes are open and his heart is awake, in whichever direction of the universe he looks, it opens up an avenue of opportunities to get to know Allah. To draw our attention to it, each and everything in the universe changes its appearance countless number of times so that we see in it the signs of Allah and learn from them. Allah tells us in the Quran:

"Behold! In the creation of the heavens and the earth; in the alternation of the night and the day; in the sailing of the ships through the ocean for the profit of mankind; in the rain which Allah sends down from the skies and the life which He gives therewith to an earth that is dead; in the beasts of all kinds that He scatters through the earth; in the change of the winds and the clouds which they trail like their slaves between the sky and the earth; (here) indeed are signs for a people that are wise." **(2:164)**

But it is indeed a person's strange misfortune that while on the one hand he is so fond of proving how clever he is that if he finds himself in possession of a broken piece of pottery from the ruins of Pompeii or Mohenjo-Daro, he busies himself in working out the time period

it belonged to, investigating the find right down to the civilization, religion, politics, philosophy and literally everything of the era it belonged to. While on the one hand he is so curious about the past, yet, on the other hand, he exhibits such lack of judgment and perception that neither is he able to understand anything of the wisdom that the Creator of the universe has stamped on every petal and flower nor does he acquire guidance from it. Even Science sees wisdom all around it but not the Wise One from whom it emanates.

The state of heart created as a result of reflecting on all the realities in the universe leads to the realization of the greatness and power of the Creator and this awareness of Him is the true foundation of Eeman. We earnestly request you to not view these realities in a superficial manner, but with firm faith and conviction let Allah's greatness and power be embedded in the depths of your heart. Make it a habit to ponder and reflect on the signs in both the universe around you and within yourself. Look carefully and marvel at the variety of plants in your garden, how their buds are formed, and how they blossom into fruits and flowers. Notice carefully the different fragrance of the flowers, the flavours of the fruit, the splendid colours in nature, the birds in their flight, the magical star-studded sky, the shining moon, an infant's cute and delightful existence…Suffuse your being with these wonders of creation and then you will feel closeness to the Creator. From all of them, He is calling out to you and saying: "Do you recognize Me?" With a tear-stained face you will find yourself replying spontaneously: "Yes my Lord, indeed I have recognized You." You will feel overwhelmed and rejuvenated by your own response. In the same way a child who is terrified of the dark is reassured by the father's presence, once you get to know your Lord, you too will feel His presence. This realization will give you so much peace and comfort that in comparison, the world's delights will seem to pale into insignificance. Eeman will fill your heart with such peace that all grief and fear will depart and the cry: "Is not Allah enough for His slave?" will seem to come from your very being and with eyes overflowing with tears you will prostrate yourself to Him.

We are on the receiving end of the constant attention of such a Great and Munificent God who loves us dearly and continues through a variety of ways to invite us to reform our lives. He has sent us His Book of Guidance (Quran), but if we do not call out to Him and do not even open the Book He has sent us, then are we not deserving of the worst punishment?

Facts about the human body and the universe have been taken from the following DVD and book.

'God Arises' by Maullana Wahid ud din Khan

'The Miracle Planet' a DVD by Harun Yahya

For more facts visit www.harunyahya.com

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